

SUMMARY OF REGISTERS

REGISTERS (WRITE) S-PPU

ADDRESS	D7	D6	D5	D4	D3	D2	D1	D0
2100H	Blanking				FADE IN/OUT (0~15)			
2101H	OBJ Size Select		OBJ Home Select		OBJ Home Base Address			
2103H	OAM Address							
2103H	OAM Priority Rotation				OAM Address MSB			
2104H	OAM Data (Low, High)							
2105H	BG 16 x 16 Size		BG3 Priority		BG Mode (0~7)			
	BG4	BG3	BG2	BG1				
2106H	Mosaic Size (0~15)			Mosaic Enable				
				BG4	BG3	BG2	BG1	
2107H	BG1 SC Base Address					BG1 SC Size		
2108H	BG2 SC Base Address					BG2 SC Size		
2109H	BG3 SC Base Address					BG3 SC Size		
210AH	BG4 SC Base Address					BG4 SC Size		
210BH	BG2 Home Base Address			BG1 Home Base Address				
210CH	BG4 Home Base Address			BG3 Home Base Address				
210DH	BG1 H-Offset (Low, High)							
210EH	BG1 V-Offset (Low, High)							
210FH	BG2 H-Offset (Low, High)							
2110H	BG2 V-Offset (Low, High)							
2111H	BG3 H-Offset (Low, High)							
2112H	BG3 V-Offset (Low, High)							
2113H	BG4 H-Offset (Low, High)							
2114H	BG4 V-Offset (Low, High)							
2115H	H-L Inc				V-RAM Address Sequence Mode			
					Full Graphic	SC Increment		
2116H	V-RAM Address (Low)							
2117H	V-RAM Address (High)							
2118H	V-RAM Data (Low)							
2119H	V-RAM Data (High)							
211AH	Screen Over						Screen Flip	
							V	H

REGISTERS (WRITE) S-PPU

ADDRESS	D7	D6	D5	D4	D3	D2	D1	D0
211BH	Matrix Parameter A (Low, High)							
211CH	Matrix Parameter B (Low, High)							
211DH	Matrix Parameter C (Low, High)							
211EH	Matrix Parameter D (Low, High)							
211FH	Center Position X (Low, High)							
2120H	Center Position Y (Low, High)							
2121H	CG-RAM Address							
2122H	CG-RAM Data (Low, High)							
2123H	BG2 Window				BG1 Window			
	W2 EN	IN/OUT	W1 EN	IN/OUT	W2 EN	IN/OUT	W1 EN	IN/OUT
2124H	BG4 Window				BG3 Window			
	W2 EN	IN/OUT	W1 EN	IN/OUT	W2 EN	IN/OUT	W1 EN	IN/OUT
2125H	Color Window				OBJ Window			
	W2 EN	IN/OUT	W1 EN	IN/OUT	W2 EN	IN/OUT	W1 EN	IN/OUT
2126H	Window H0 Position (0~255)							
2127H	Window H1 Position (0~255)							
2128H	Window H2 Position (0~255)							
2129H	Window H3 Position (0~255)							
212AH	Window Logic							
	BG4		BG3		BG2		BG1	
212BH					Window Logic Color OBJ			
212CH					Through Main OBJ BG4 BG3 BG2 BG1			
212DH					Through Sub OBJ BG4 BG3 BG2 BG1			
212EH					Through Main (window) OBJ BG4 BG3 BG2 BG1			
212FH					Through Sub (window) OBJ BG4 BG3 BG2 BG1			
2130H	Window ON/OFF						CG ADD Enable	Direct Select
	Main SW (M1/M0)		Sub SW (S1/S0)					
2131H	ADD/SUB	1/2 Enable	BACK	OBJ	ADD or SUB Enable			
					BG4	BG3	BG2	BG1
2132H	Color Constant Data Color Brilliance Data							
	Blue	Green	Red					
2133H	EXT Sync	EXT Input			Pseudo 512	224/239	OBJ-V Select	Interlace
2134H	MPY (Low)							
2135H	MPY (Mid)							
2136H	MPY (High)							

REGISTERS (READ) S-PPU

ADDRESS	D7	D6	D5	D4	D3	D2	D1	D0
2137H	Soft Latch for H/V Counter							
2138H	OAM Data (Low, High)							
2139H	V-RAM Data (Low)							
213AH	V-RAM Data (High)							
213BH	CG Data (Low, High)							
213CH	Output Data of H-Counter (Low, High)							
213DH	Output Data of V-Counter (Low, High)							
213EH	Time Over	Range Over	Master /Slave		5C77 Version Number			
213FH	Field	EXT Latch		NTSC/PAL	5C78 Version Number			
2140H	APU I/O Port							
2141H	APU I/O Port							
2142H	APU I/O Port							
2143H	APU I/O Port							

REGISTERS (WRITE) S-CPU

ADDRESS	D7	D6	D5	D4	D3	D2	D1	D0
4200H	NMI Enable		Timer V-EN	Enable H-EN				Joy-C Enable
4201H	I/O Port							
4202H	Multiplicand-A							
4203H	Multiplier-B							
4204H	Dividend-C (Low)							
4205H	Dividend-C (High)							
4206H	Divisor-B							
4207H	H-Counter Timer							
4208H								H-MSB
4209H	V-Counter Timer							
420AH								V-MSB
420BH	General Purpose DMA (Enable Flag)							
	CH7 EN	CH6 EN	CH5 EN	CH4 EN	CH3 EN	CH2 EN	CH1 EN	CH0 EN
420CH	H-DMA (Enable Flag)							
	CH7 EN	CH6 EN	CH5 EN	CH4 EN	CH3 EN	CH2 EN	CH1 EN	CH0 EN
420DH								2.68 /3.58

REGISTERS (READ) S-CPU

ADDRESS	D7	D6	D5	D4	D3	D2	D1	D0
4210H	Blank NMI				5A22 Version Number			
4211H	Timer IRQ							
4212H	V-Blank	H-Blank						Joy-C Enable
4213H	I/O Port							
4214H	Quotient-A (Low)							
4215H	Quotient-A (High)							
4216H	Product-C / Remainder (Low)							
4217H	Product-C / Remainder (High)							
4218H	Joy Controller I (Low)							
	X	Y	TL	TR				
4219H	Joy Controller I (High)							
	A	B	Select	Start	Up	Down	Left	Right
421AH	Joy Controller II (Low)							
421BH	Joy Controller II (High)							
421CH	Joy Controller III (Low)							
421DH	Joy Controller III (High)							
421EH	Joy Controller IV (Low)							
421FH	Joy Controller IV (High)							

REGISTERS (WRITE) S-CPU

(X : Channel <0-7>)

ADDRESS	D7	D6	D5	D4	D3	D2	D1	D0
43X0H	CHX T-Org*	CHX Type		A-Bus Address INC/DEC Fixed		CHX Transfer Word Select		
43X0H	CHX B-Address							
43X2H	CHX A1 Table Address (Low)							
43X3H	CHX A1 Table Address (High)							
43X4H	CHX A-Table Bank							
43X5H	CHX Data Address (H-DMA) Number of Byte to be transferred (General purpose DMA)							(Low)
43X6H	CHX Data Address (H-DMA) Number of Byte to be transferred (General purpose DMA)							(High)
43X7H	CHX Data Bank (H-DMA)							
43X8H	CHX A2 Table Address (Low)							
43X9H	CHX A2 Table Address (Low)							
43XAH	Continue	Number of Line						

Note : T-Org means the "Transfer Origination"